

### **REMARKS**

The Non-Final Office Action dated July 10, 2003 has been given careful consideration by the applicants. Claims 1-28, 30-34 remain in the application. Claims 29 and 35 have been canceled. Reconsideration of the application is hereby respectfully requested.

#### **The Office Action**

Claims 16 and 27-29 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 5,923,712 to Leyendecker et al.

Claims 17, 21, 30, 34 and 35 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,920,808 to Jones et al.

Claims 1-3, 8-12, 15, 16, 18, 19, 22-24, 27-29, 31 and 32 were rejected under 35 U.S.C. §103 as being unpatentable over Jones in view of U.S. Patent No. 5,963,549 to Perkins et al.

Claims 4, 5, 7, 13, 20, 25 and 33 were rejected under 35 U.S.C. §103 as being unpatentable over Jones in view of Perkins and further in view of U.S. Patent No. 6,288,610 to Miyashita.

#### **The Claims are Patentably Distinct over the Cited Patents:**

Claims 16 and 27-29 were rejected under 35 U.S.C. §102(e) as being anticipated by the Leyendecker patent. However, as detailed below, Leyendecker does not anticipate these claims.

More specifically, Leyendecker does not fairly disclose a receiver, as disclosed and claimed, that samples an RF signal. Leyendecker merely discloses a trainer 431 (Figure 4) that reviews the entire frequency spectrum, not samples. The Leyendecker system then performs a waveform analysis, or waveform comparison. The receiver of the present invention allows for an analysis of selected frequency

samples to occur, not a waveform comparison. Accordingly, claims 16 and 27-28 -- which recite such a receiver for sampling -- are not anticipated by Leyendecker.

Moreover, as previously asserted, independent claims 16 and 27 recite means-plus-function language. As mandated by statute (i.e., 35 U.S.C. §112, sixth paragraph), the details of the specification must be referenced to interpret these claims. In this regard, it is clear that at least the means for sampling, as disclosed, does not correspond to the teachings of Leyendecker. Again, Leyendecker relates to a waveform analysis, not a spectrum analysis.

Claims 17, 21, 30, 34 and 35 were also rejected under 35 U.S.C. §102(e) as being anticipated by the Jones patent. The Examiner's formal rejection takes on substantially the same form as that in the last Office Action. Therefore, the Examiner is referred to the previous amendment for the applicants' response. However, as detailed below, Jones does not anticipate these claims for an additional reason.

More specifically, Jones does not disclose a system that includes a receiver operative to obtain samples of the output RF signals, as disclosed and claimed in the present invention. The system of the Jones patent utilizes a waveform comparison in that it retrieves the entire waveform from the output of the amplifier and compares that waveform to the waveform that was input to the amplifier. This is distinct from the present invention which utilizes a spectrum analysis featuring a receiver that samples RF signals from the output. This sampling is ultimately used to perform a procedure to modify the coefficients and to minimize distortion or spurious output of the system. The present invention has no need to perform a waveform comparison and/or to analyze the input waveform, as in the Jones patent.

Because each of the independent claims 17, 21 and 30 recite the RF sampling features, these claims, and all claims dependent thereon (e.g. claim 34), are not

anticipated by Jones.

In addition, the applicants' previously identified distinctions between these claims and Jones. In the outstanding Office Action, the Examiner has attempted to respond to these arguments. Although the applicants maintain their distinctions over the art, the Examiner's response to the arguments do not overcome the fact that Jones does not disclose a receiver that is operative to sample the RF signal, as disclosed and claimed in the present invention.

Claims 1-3, 8-12, 15, 16, 18, 19, 22-24, 27-29, 31 and 32 were rejected as being obvious over Jones in view of Perkins. Again, the Examiner's formal rejection is in the form of the previous Office Action. Therefore, the Examiner is referred to the previous amendment for the applicants' response. However, as will be detailed below, these claims are not rendered obvious by this combination for an additional reason.

Notably, the combination of Jones and Perkins, even if they could be combined, does not cure the deficiencies of Jones noted above. For example, as previously argued, the Jones patent does not illustrate a receiver that samples the RF signals, as claimed and disclosed. The Jones patent relates to a system that performs waveform comparison, not spectrum analysis. The Examiner points to no portion of Perkins that would cure this deficiency. Therefore, the claims are not rendered obvious by the combination.

Further, the applicants' previously asserted that there was no motivation to combine the teaching of Jones and Perkins. The Examiner has attempted to respond to the arguments but has not specifically addressed issues raised by the applicants, such as the fact that Jones does not identify a particular pre-distortion method. The Examiner merely repeats this previous statement on motivation to combine and concludes that the combination discloses a feedback.

In addition, the applicants previously argued that the resultant combination would not render the claims obvious. That is, the resultant combination would be a system that provides predistortion by some unspecified means and would include a clipping portion that clips signals based on summing in-phase and quadrature components and subsequently using look-up tables. The Examiner does not address this circumstance in the Office Action.

Accordingly, the claims are not rendered obvious by the suggested combination of Jones in view of Perkins.

Claims 4, 5, 7, 13, 20, 25 and 33 were rejected under the Jones and Perkins combination in further view of Miyashita. As previously asserted, the Examiner, however, does not adequately establish that these patents are combinable and points to no portions of Miyashita that cure the specific deficiencies of the combination noted above. Therefore, the Examiner's rejection should be reconsidered.

### **Interview Summary**

On July 2, 2003, the applicants and the Examiner conducted a telephone interview with respect to the present application. During the interview, the response previously filed by the applicants was referenced but the additional argument that the cited art fails to specifically point out a receiver to conduct a spectrum analysis was also set forth by the applicants. No agreement was reached on the claims and the Examiner indicated that he would issue an Office Action.



### CONCLUSION

In view of the foregoing amendments and comments, favorable action is respectfully requested.

Respectfully submitted,

FAY, SHARPE, FAGAN,  
MINNICH & McKEE, LLP

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Date

Joseph D. Dreher  
Joseph D. Dreher  
Reg. No. 37,123  
1100 Superior Avenue  
7<sup>th</sup> Floor  
Cleveland, Ohio 44114-2579  
(216) 861-5582

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